

VKUR Innovations Response to "Don't Junk-it List-it" Project Proposal Submitted to Clarkton Corporation



Your Ideas, Our Innovation



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1. INTRODUCTION AND OVERVIEW

This proposal introduces VKUR Innovations and our qualifications to partner with Clarkton Corporation on the upcoming project "Don't Junk-it List it". VKUR Innovations has extensive experience providing Software development and information technology (IT) consulting services and we are confident we can exceed your expectations.

About VKUR Innovations

VKUR Innovations, established in the year 2000, stands as a prominent leader in the realm of software development and information technology (IT) consulting services. Our corporate headquarters is strategically located in the vibrant city of Boston, Massachusetts, and we have strategically positioned regional offices across various states in the USA. Our organizational framework comprises distinct departments, each dedicated to delivering specialized expertise in software development and IT consulting services.

Throughout our 22-year journey in the industry, we have consistently nurtured and retained top-tier talent, resulting in our current roster of over 100 dedicated professionals. As a privately held firm, VKUR Innovations remains steadfast in its original identity, unstained by mergers, acquisitions, or name alterations. We hold the requisite licenses to conduct business in multiple states, and should the need arise, we are readily equipped to furnish the necessary documentation upon request. Our client list includes partnerships with significant automakers, aftermarket service providers, and parts suppliers. We've worked on a lot of projects specifically for the automobile industry over the years, from dealer inventory management systems to customer portals for service appointments. We're honoured to have gotten compliments for the level and promptness of our work from our automotive clients. Upon request, we will be pleased to give references.

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Contact person: John Green, Business Development Manager

Contracts will be executed by John Green, CEO. This project will be led by Kurra, Sai Krishna, Project manager.

VKUR Innovations will leverage of our cooperation we have with our subcontractors to procure additional people and specific technological elements.

2. SKILLS OF IMPORTANT PROJECT TEAM MEMBERS

A strong project team has been put together for this engagement:

Project Manager/Scrum master: Kurra, Sai Krishna

Professional Background:



- o Possesses 7 years of extensive experience in the management of software projects.
- Holds a prestigious PMP certification, demonstrating a commitment to excellence in project management.
- Proficient in guiding projects using Agile/Scrum methodologies, fostering a dynamic and responsive work environment.
- o Boasts a robust technical foundation, underpinned by a Computer Science degree

• Key Responsibilities:

- Overarching project leadership and seamless coordination, ensuring that all project facets align harmoniously.
- Adeptly facilitates the Scrum process, eliminating roadblocks and fostering transparent communication among the team and stakeholders.
- Skilled in stakeholder engagement, with a focus on effective communication and comprehensive reporting.
- Demonstrates mastery in risk management and deftly resolves any issues that may arise during project execution.
- Strategic resource allocation and meticulous scheduling to optimize project resources.
- Diligently oversees project milestones, ensuring their timely accomplishment to meet project objectives.

Lead Developer: Chennuri, Vidyadhari

Professional Experience:

- Accumulated a decade of experience as the leader of development teams.
- Possesses expertise in React, Node.js, and AWS, exhibiting proficiency in these technologies.
- Spearheaded architecture and design initiatives in previous projects, showcasing a knack for strategic planning.
- Skilfully managed teams comprised of 5-8 developers, fostering a collaborative and productive work environment.
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Key Duties:

- Demonstrates technical leadership prowess, making critical decisions that drive project success.
- Efficiently coordinates the development team, harmonizing their efforts towards project goals.
- Ensures the meticulous fulfilment of technical requirements, maintaining a high standard of quality.
- Skilfully troubleshoots and resolves technical issues, mitigating potential setbacks.
- Engages in seamless collaboration with the Project Manager, fostering a synergistic project ecosystem.

Frontend Developer: Kanchukommula, Uday Kumar

Professional Background:

- Possesses 5 years of hands-on experience working with React and Angular, showcasing mastery in these technologies.
- Successfully crafted user interfaces (UIs) and enhanced user experiences (UX) for a variety of web and mobile applications.



- Demonstrates proficiency in HTML/CSS and excels in responsive design, ensuring optimal user experiences across platforms.
- Exhibits a solid grasp of visual design principles, contributing to aesthetically pleasing and user-friendly interfaces.

Key Roles and Responsibilities:

- Engages in the development of both front-end and backend components, playing a pivotal role in the holistic project development process.
- Impeccably implements technical solutions in accordance with project requirements, translating concepts into practical solutions.
- Actively participates in code reviews, thereby upholding high standards of code quality and ensuring the robustness of project deliverables.
- Fosters a culture of collaboration by actively engaging with fellow team members, promoting a cohesive and efficient project environment.

Backend Developer: Kovvada, Ravi Teja

• Professional Background:

- Boasts an impressive track record of 8 years in the field, with comprehensive expertise in Node.js, PostgreSQL, Oracle, and AWS.
- Distinguished for crafting APIs and establishing seamless integrations with third-party services, enhancing project functionality.
- Adept at fine-tuning queries and optimizing database performance, ensuring swift and efficient data retrieval.
- Demonstrates a keen understanding of security and compliance best practices, safeguarding data and maintaining regulatory standards.

• Key Roles and Responsibilities:

- Assumes the pivotal role of managing server-side logic and overseeing database operations, ensuring robust data management.
- Upholds data integrity, security, and scalability, safeguarding critical project assets.
- Takes charge of the integration of third-party services and APIs, enhancing project capabilities and connectivity.
- Engages in close collaboration with the development team, collectively addressing data-related tasks and fostering a harmonious work environment.

3. METHODOLOGY AND APPROACH FOR PROPOSED IMPLEMENTATION

We ensure that as your business expands, our solution expands seamlessly because our applications are designed on scalable architectures like micro services. We give your users' data protection first priority in the digital age, where data breaches frequently make the news. We make sure that your marketplace is secure by using top-notch encryption, conducting regular security assessments, and following international data protection laws. As quick page loading and transaction processing are crucial in online markets, we use cutting-edge caching techniques, and database optimization approaches.



Agile promotes iterative development, frequent feedback, and adaptability to changes given the project's dynamic nature, ensuring that the final result precisely matches the requirements as they evolve. The "Don't Junk-it List-it" initiative should use Scrum methodology, according to VKUR Innovations. Scrum is an agile methodology that works effectively for completing high-value projects with close cross-functional team communication and incremental improvements.

Shopping Model:

- Search and Filter: Functionality to enable users to find specific parts based on criteria like make, model, year, and more.
- o Product View: Displays detailed information about a part, including images, descriptions, and possibly customer reviews.
- o Cart Management: Add, remove, and manage parts in a shopping cart.

Billing Model:

- o Invoice Generation: Once a purchase is confirmed, the system creates an itemized invoice.
- Payment Processing: Integration with payment gateways to handle transactions (e.g., credit card, PayPal, etc.).
- o Order History: Allows users to view past purchases and their details.
- Refunds and Returns: Handles requests for order cancellations, returns, and the respective refunds.

> Authentication Model:

- o Registration: Users sign up, providing necessary details.
- Login: Secure user login with credentials.
- Password Management: Functionality for resetting forgotten passwords and updating passwords.
- Session Management: Handling user sessions to ensure secure access during active sessions.
- OAuth: If integrating with other platforms (e.g., Facebook, Google), handling OAuthbased authentication.

Parts Management Model:

- Parts Listing: Allows vendors or individuals to list car parts for sale.
- o Inventory Management: For vendors to manage the quantity of parts available.
- o Parts Validation: Ensures that the parts being listed meet certain criteria or standards.
- o Pricing: Setting, updating, and potentially offering dynamic pricing or discounts.
- o Images and Multimedia: Handling the upload, storage, and display of images/videos associated with parts.

User & Vendor Management:

- Profile Management: Users and vendors can update their profile information, settings, etc.
- Ratings and Reviews: Users can rate and review purchased parts or vendors.
- o Role-based Access: Differentiating access levels and functionalities based on user roles (e.g., individual buyer, vendor, admin).

> Support and Communication:

- Messaging: If the platform supports direct messaging between buyers and sellers.
- Help Centre: FAQs, guides, and tutorials.
- Support Ticketing: Users can raise issues or queries.

Duration and project timeline: 3.5 months (Approximately 15 weeks)



A. Initialization of Project (Week 1)

Sprint 0

- Introduce Scrum, the roles, rituals, and artefacts during the kick-off meeting.
- o Configure the Scrum board and associated tools (like JIRA).
- Along with stakeholders, create the initial product backlog.
- Define the Definition of Done (DOD).
- o Allocating resources and creating the development environment

B. Discovery and Design (Weeks 2-3)

Sprint 1

- o Prioritize and choose backlog items for this sprint in the sprint planning phase.
- Daily Stand-ups of 15-minute sessions to discuss progress and blockers.
- Development
- o Detailed requirements gathering.
- Designing a system architecture.
- Mock-up for UI/UX.
- o Review of the Sprint: Present work to stakeholders and get feedback.
- o Sprint Retrospective: Discuss about what worked well and what needs to be improved.

C. Development Sprints (Weeks 4-12)

Sprint 2 (Weeks 4-5)

- o Focus: User Registration and Profile Management.
- o Follow Scrum ceremonies: Daily Stand-ups, Sprint Review, and Sprint Retrospective.

Sprint 3 (Weeks 6-7)

- o Focus: Buy/Sell Parts modules and basic search functionality.
- o Follow Scrum ceremonies.

Sprint 4 (Weeks 8-9)

- o Focus: Enhanced search, system integration for car data, and price suggestion feature.
- Follow Scrum ceremonies.

Sprint 5 (Weeks 10-11)

- o Focus: Order Management and Payment modules.
- o Follow Scrum ceremonies.

Sprint 6 (Weeks 12)

- o Focus: Integration with external platforms (e.g., Facebook, eBay).
- o Follow Scrum ceremonies.

D. Sprint for User Acceptance Testing (UAT) (Week 13)

- Conducted in a real-world environment with actual users.
- Feedback will be included in the product backlog for the subsequent sprint.

Deployment Sprint (Week 14)

- Get ready to deploy.
- o Perform final internal examinations.
- Open up the platform to users

F. Support Sprint (Week 15)

- o Examine the platform for problems.
- Provide immediate solutions.
- o For the product's next evolution, seek feedback.



Technical Approach: VKUR Innovations will be able to construct the platform transparently, scalable, and maintainable by employing open-source tools and technologies.

- Version Control: Git with GitHub for version control.
- Communication: Using Slack for team communication.
- Documentation: Wiki.js for maintaining documentation.
- Database Design: pgModeler for PostgreSQL.
- Backend Framework: Express (Node.js).
- Frontend: React.
- Database: PostgreSQL and MongoDB.
- Containerization: Docker.
- Continuous Integration/Continuous Deployment (CI/CD): Jenkins.
- API Testing: JUnit.
- Authentication: OAuth with libraries like Passport.js for Node.js.
- API Gateway: Kong.
- Data Integration: Apache Kafka for stream-processing.
- Unit Testing: Mocha (Node.js).
- **Deployment:** Kubernetes for orchestration.
- Cloud: AWS using EC2 instances.
- Monitoring: Prometheus and Grafana.
- Logging: ELK Stack (Elasticsearch, Logstash, and Kibana)

4. GENERAL COSTS, WARRANTY, BILLING AND INVOICING

4.1 General Costs

Initial Development Cost:

• The estimated cost for the development of the platform over 3.5 months is approximately \$235,000 which includes planning, design, development, and testing phases.

Post-Launch Costs:

 Maintenance, updates, marketing, user support, and training for one year are estimated at \$263,000.

Total Estimated Cost for the First Year:

- Approximately \$498,000
- * Please note, based on the available data and average market prices, this is a rough estimate. Prices could change depending on Clarkton Corporation's unique needs, the size of the user base, regional market variances, and other external factors to consider. Actual costs may vary based on detailed requirements, unforeseen challenges, additional features, or changes in market rates.

Breakup for the Initial Development Cost (\$235,000):

- ✓ Planning: This phase involves understanding requirements, deciding on the tech stack, creating a roadmap, and establishing milestones. Estimated Cost: \$35,000
- ✓ Design: This includes UI/UX design, wire framing, mock-ups, and any user experience research. Estimated Cost: \$40,000



- ✓ Development: This is the actual coding and building phase where the majority of the budget is usually allocated. This encompasses frontend, backend, database setup, API integrations, etc. Estimated Cost: \$120,000
- ✓ Testing: This phase involves unit tests, integration tests, bug fixes, and quality assurance. Estimated Cost: \$30,000
- ✓ Miscellaneous: This covers any unforeseen expenses or any additional costs like licensing, purchasing of third-party tools, etc. Estimated Cost: \$10,000

Post-Launch Costs (\$263,000):

- ✓ Maintenance: Regular updates, bug fixes, server costs, and ensuring the platform runs smoothly. Estimated Cost: \$70,000
- ✓ Updates: Any additional features or improvements based on user feedback. Estimated Cost: \$40,000
- ✓ Marketing: Promotions, advertisements, SEO, content marketing, etc. Estimated Cost: \$100,000
- ✓ User Support: Hiring a support team, training them, and setting up support tools. Estimated Cost: \$35,000
- ✓ Training: Training sessions for internal teams, creating documentation, and any external training for clients or big vendors. Estimated Cost: \$10,000
- ✓ Miscellaneous: Unforeseen expenses post-launch. Estimated Cost: \$8,000

4.2 Warranty

VKUR Innovations provides a standard 12-month warranty from the date of launch. This warranty covers:

- 1. Any software defects or bugs that are a result of our development.
- 2. Issues arising from the standard use of the platform that were not detected during the testing phase.
- 3. Performance issues that could prevent the normal functionality of the application.

Please note that if any third-party vendors or internal teams outside of VKUR Innovations modify or update the platform, then the warranty will be voided.

4.3 Billing

Our billing procedure is transparent and follows these guidelines:

- 1. Milestone-based Payments: We'll set project milestones, and after the completion of each milestone, an invoice will be generated.
 - o Initial Setup and Requirement Gathering: 10% of the total project cost.
 - Design Completion: 15% of the total project cost.
 - Core Feature Development: 40% of the total project cost.
 - Testing and Final Deployment: 25% of the total project cost.
 - Post-Launch Support and Maintenance (for the first month): 10% of the total project cost.
- 2. Monthly Billing: A monthly charge will be sent at the very first of each month for post-launch activities like maintenance, support, and marketing.

4.4 Invoicing

Electronic invoices will be delivered to the authorized contact of Clarkton Corporation. The average payment period is 30 days (NET 30) from the date of billing. We do accept payments via checks, credit



cards, and bank transfers. According to standard business procedures, any late payments could result in penalty. For any discrepancies or queries related to invoices, Clarkton Corporation can reach out to our accounts department within 10 working days from the date of the invoice.

4.5 Submission

- The Project will be submitted in or before 3.5 months.
- All the required documents like Manual deployment steps, DOD docs, Technical approaches, Revenue details documents, etc.
- Manager will be the first point of contact regarding submission guidelines.

5. LICENSING

5.1 Platform Licensing:

The platform will be developed on open-source technologies, making sure that no additional licensing costs are charged. However, if any proprietary software or platforms are preferred and require licensing fees, these will be informed in advance.

5.2 Third-party Integrations:

The client will be responsible for any licensing fees associated with third-party integrations, such as those involving payment gateways or particular APIs. If required, we will offer the relevant information and help in obtaining these licenses.

5.3 User Licensing:

The platform will be licensed to accommodate an unlimited number of users. However, if there are scalability concerns or if a specific technology, we employ has user-based licensing, we will discuss and determine the most cost-effective approach.

5.4 Licensing Transfer:

Post-development, the license of the custom-developed software will be transferred to your organization. This implies that you will have complete ownership of the software and all rights to it. This includes freedom to modify, distribute, or integrate it further as you need. We make an effort to offer an easy and trustworthy experience to our clients which guarantees transparency in costs, warranties, billing, and licensing. All costs and terms will be clearly outlined in our formal agreement to avoid any future discrepancies or misunderstandings.

6. CONCLUSION

In conclusion, VKUR Innovations is enthusiastic about the prospect of collaborating with Clarkton Corporation on the "Don't Junk-it List-it" project. Our two decades of experience in software development and IT consulting, combined with our specialized expertise in the automobile industry, position us uniquely to address the project's intricate requirements.

Our proposed technical approach, centred on cutting-edge and open-source technologies, underscores our commitment to deliver a transparent, scalable, and maintainable platform. By emphasizing agile methodologies, particularly Scrum, we aim to ensure a dynamic and iterative development process that can adeptly adapt to evolving requirements and stakeholder feedback.



Our transparent costing structure and our commitment to post-launch support further underscore our commitment to transparency, quality, and client satisfaction. With a focus on every facet of the project, from user experience design to backend stability, and from billing mechanics to licensing clarity, we ensure that our collaboration would be streamlined, effective, and fruitful.

Should Clarkton Corporation choose to proceed with VKUR Innovations, it would not only be commissioning a software development project but also forging a partnership rooted in mutual respect, open communication, and a shared vision of success. We eagerly await the opportunity to begin this journey and contribute meaningfully to Clarkton Corporation's objectives.

